

Bachelor of Science (B.Sc.) Semester-II (C.B.S.) Examination**ENVIRONMENTAL SCIENCE****(Introduction to Ecosystem and Biodiversity)****Compulsory Paper—2**

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) **All** questions are compulsory and carry equal marks.

(2) Illustrate your answer with suitable examples and diagrams.

1. What is biomes ? Explain the major terrestrial biomes of the world. 10

OR

- (a) Discuss the various steps involved in oxygen cycle. 5

- (b) Define ecosystem. Explain pond as an aquatic ecosystem. 5

2. Define biogeochemical cycles. How are the classified ? Explain sulphur cycle with an illustration. 10

OR

- (a) Define productivity. Explain the factors affecting the productivity. 5

- (b) Discuss the light and dark bottle method for measuring primary productivity. 5

3. What is deforestation ? Give an account of the major factors responsible for deforestation. 10

OR

- (a) Explain the issue connected with Chipko movement. 5

- (b) What are the objectives of national forest policy ? 5

4. What are Hot-spots of biodiversity ? Which are the hot-spots found in India ? Add an informative note on salient features. 10

OR

- (a) What is meant by In-situ and Ex-situ conservation of biodiversity ? Give examples. 5

- (b) Explain the factors responsible for loss of biodiversity. 5

5. Write in short (any **ten**) :

- (a) What are the biotic and abiotic component of an ecosystem ?

- (b) What are food chain and food webs ?

- (c) What are the examples of terrestrial ecosystem ?

- (d) Name the stages involved in nitrogen cycle.

- (e) What do you mean by net primary productivity ?

- (f) Explain the chlorophyll method used for the measurement of primary productivity.

- (g) Name the methods to control forest fires.

- (h) What are types of social forestry ?

- (i) What does JFM stand for ?

- (j) Distinguish between endangered and endemic species.

- (k) Significance of Biodiversity register.

- (l) What do you mean by option value of biodiversity ? 10×1=10